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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,376	09/29/2003	Peter Dickey	249212023500	6858

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EXAMINER	
LOWE, MICHAEL S	
ART UNIT	PAPER NUMBER
3652	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/675,376	DICKEY ET AL.	
	Examiner	Art Unit	
	M. Scott Lowe	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/28/06 & 1/4/07*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18,22 and 23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,10-18,,22 and 23* is/are rejected.

7)☒ Claim(s) *6-9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/4/07 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "the fourth axis" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim. For sake of examination it is assumed applicant meant for claim 6 to depend from claim 5.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3,22 are rejected under 35 U.S.C. 102(e) as being anticipated by Takano (US 7,100,173).

Re claim 1, Takano teaches a storage library system 100, comprising:

a vertical stationary support member 211 having a first major axis oriented vertically (figure 3,7); and

a cartridge transport assembly 200, comprising:

a cartridge retrieving mechanism 240 configured to retrieve a removable media cartridge 30, said cartridge transport assembly being coupled to the support member 211 for movement along the first major axis, wherein the cartridge retrieving mechanism is positionable in four degrees of freedom.

Re claim 2, Takano teaches a first degree of freedom of the cartridge retrieving mechanism comprises linear movement along the stationary support member 211.

Re claim 3, Takano teaches a second degree of freedom of the cartridge retrieving mechanism comprises linear movement along a second axis approximately orthogonal to the first major axis.

Re claim 22, Takano teaches the cartridge transport assembly 200 comprising a horizontally disposed tray assembly for supporting the cartridge retrieving mechanism.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4,5,10-14,16-18,23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takano (US 7,100,173) in view of Wanger (US 5,043,962).

Re claim 4, Takano is silent as to whether the cartridge retrieving mechanism comprises linear movement along a third axis approximately orthogonal to the first major axis and the second axis. Wanger teaches (figure 1) a cartridge retrieving mechanism 22 comprising linear movement along a third axis approximately orthogonal to the first major axis and the second axis in order to securely load and unload a cartridge 30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Takano by Wanger to have the cartridge retrieving mechanism comprises linear movement along a third axis approximately orthogonal to the first major axis and the second axis in order to along the cartridges to be securely loaded and unloaded.

Re claim 5, Takano teaches (figures 7-10) a fourth degree of freedom of the cartridge retrieving mechanism comprises rotational movement about a fourth axis.

Re claim 10, Takano teaches a storage library system 100 (or 600), comprising: a vertical stationary support member 211 having a first major axis oriented vertically (figure 3,7);

a cartridge transport assembly 200 coupled to the stationary support member and moveable along the first major axis (figure 3,7), the cartridge transport assembly comprising:

a first assembly 220 coupled to the vertical stationary support member 211;

a first actuator (not numbered) coupled to the first carriage and the vertical stationary support member 211 configured to actuate linear movement of the first carriage along the stationary support member;

a second assembly 224 movably coupled to the first assembly;

a second actuator (not numbered, figure 7) engaging the first and second assemblies configured to actuate linear movement of the second assembly along a second axis non-parallel to the first axis;

a third assembly (230 or 240) movably coupled to the second assembly;

and a cartridge retrieval mechanism 240 coupled to the third assembly.

Takano is silent as to whether the cartridge retrieving mechanism comprises linear movement along a third axis approximately orthogonal to the first major axis and the second axis. Wanger teaches (figure 1) a cartridge retrieving mechanism 22 comprising linear movement along a third axis approximately orthogonal to the first major axis and the second axis in order to securely load and unload a cartridge 30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Takano by Wanger to have the cartridge retrieving mechanism comprises linear movement along a third axis approximately orthogonal to the first

major axis and the second axis in order to along the cartridges to be securely loaded and unloaded.

Re claim 11, Takano teaches a rotary actuator engaging the third carriage (230 or 240) and the cartridge retrieval mechanism configured to actuate rotational movement of the cartridge retrieval mechanism.

Re claim 12, Takano teaches an extension actuator (not numbered) coupled to the carriage retrieval mechanism (generally 240) configured to extend the cartridge retrieval mechanism to retrieve a cartridge 30 from a storage bin 150 in the storage library system.

Re claim 13, Takano teaches a robotics controller (not numbered) for controlling the first, second, third, rotary, and extension actuators, and the cartridge retrieval mechanism.

Re claim 14, Takano teaches a library controller (not numbered) and an umbilical connection coupling the library controller with the cartridge transport assembly.

Re claim 16, Takano teaches (figures 3,11) an enclosure having a first side wall, an opposing second side wall, and a back wall adjacent to the first and second side walls;

a cavity region between the first side wall, the second side wall, and the back wall, the stationary support member and the cartridge transport assembly being positioned in the cavity region; and

a plurality of storage bins 150 disposed on the first and second sidewalls.

Re claim 17, Takano teaches at least one tape drive 160 positioned on the back wall of the enclosure.

Re claim 18, Takano teaches the vertical support member being positioned approximately vertically.

Re claim 23, Takano teaches the cartridge transport assembly 200 comprising a horizontally disposed tray assembly for supporting the cartridge retrieving mechanism.

Claim 15 is rejected under 35 U.S.C. 103(a) as obvious over Takano (US 7,100,173) in view of Wanger (US 5,043,962) as applied to claim 10, and further in view of Hanaki (US 6,483,204).

Re claim 15, Takano teaches a library controller and an umbilical connection coupling the library controller with the cartridge transport assembly but is silent regarding whether the umbilical connection is a cable and regarding a power supply coupled to the umbilical cable for receiving power at a first voltage, the power supply configured to convert the power at the first voltage to a plurality of different voltages. Hanaki teaches (figures 1,2, columns 11 & 12) it is known to use umbilical cables coupled to a main controller's power supply for receiving power at a first voltage, the power supply configured to convert the power at the first voltage to a plurality of different voltages in order to optimize power distribution. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Takano by Hanaki to use umbilical cables coupled to a main controller's power supply for receiving power at a first voltage, the power supply configured to convert the power

at the first voltage to a plurality of different voltages in order to optimize power distribution.

Allowable Subject Matter

Claims 6-9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims (including claim 5).

Conclusion

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Luffel (US 5,544,146) teaches a similar device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Scott Lowe whose telephone number is (571) 272-6929. The examiner can normally be reached on 6:30am-4:30pm M-W; Th work offsite.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

msl

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